REMARKS

In the Final Office Action dated March 11, 2010, in which claims 1-2, 4, 6-7, 10-11, 26 and 27 were pending, the Examiner:

objected to claims 7 and 14 due to informalities;

rejected claims 7, 11, 14 and 26-27 under 35 U.S.C. § 101 as being directed to non-statutory subject matter;

rejected claims 7 and 26-27 under 35 U.S.C. § 112, second paragraph, as being indefinite or unclear; and

rejected claims 1-2, 4, 7, 10-11, 14 and 26-27 under 35 U.S.C. § 102(e) as being anticipated by published U.S. Patent Application No. 2003/0163431 to Ginter et al. ("Ginter").

Applicants hereby amend claim 7 to incorporate the recitations of claims 26-27 and cancel claims 1-2, 4, 6, 11, 26 and 27. Claims 7 and 10 are presented for consideration, as amended, in view of the following remarks.

The Examiner objected to claim 7 due to informalities. In particular, the Examiner asserts that the antecedent "a" before "sender" should be corrected as "the" (e.g., the sender") in claim 7. Applicants respectfully disagree because the "sender" is not a claimed element of the present invention, but, instead, forms a part of the environment in which the claimed method is performed. Therefore, Applicants believe that the "sender" is properly recited as "a sender" in claim 7. Accordingly, Applicants respectfully request that the Examiner withdraw the objection to claim 7.

The Examiner rejected claim 7 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Applicants herein amend claim 7 to clarify that the claimed method recites steps performed using "a processor of a computer system". The recitation clearly meets the "machine" portion of the statutory subject matter test. Accordingly, Applicants respectfully request that the rejection of claim 7 under 35 U.S.C. § 101 be withdrawn.

The Examiner rejected claim 7 under 35 U.S.C. § 112, second paragraph, as being indefinite. In particular, the Examiner asserts that claim 7 is "unclear as to whether the encoded machine control parameters (the output of first encoding step) are encrypted or the machine control parameters provided to activate the machine tool are encrypted" (Office Action, p. 5, l. 19 – p. 6, l. 1). Applicants herein amend claim 7 to recite "second encoding the first encoded machine control parameters". Accordingly, Applicants respectfully request that the rejection of claim 7 under 35 U.S.C. 112, second paragraph, as being indefinite be withdrawn.

The Examiner rejected claims 7 and 10 under 35 U.S.C. § 102(e) as being anticipated by Ginter.

Applicants' amended claim 7 recites, *inter alia*, a method of avoiding improper machine activation by machine control parameters of a multi-axis machine tool comprising: providing the first encoded machine control parameters with a sender identification of a sender; authenticating a sender by a sender identification and a suitability of the encryption key assigned to the sender for the first decoded machine control parameters; and if a sender is authenticated, second decoding the first decoded machine control parameters; checking whether the machine control parameters were actually generated for said multi-axis machine tool; and determining whether a module associated with a sender which generated the machine control parameters is actually suitable and authorized to do so.

Ginter does not show or disclose <u>each</u> recitation of amended claim 7 for several reasons. First, at best, paragraph [0495] of Ginter discloses a method and system that are applicable to "<u>machine tools</u>" as well as a list of other electronic appliances (Ginter, paragraph [0495]). However, Ginter does not show or disclose a <u>multi-axis</u> machine tool. Thus, Ginter does not show or disclose a method and system that are applicable to *multi-axis machine tools* and *checking whether the machine control parameters were actually generated for said <u>multi-axis</u> machine tool*, as recited in amended claim 7.

The security provided by the present invention has special applicability to <u>multi-axis</u> machine tools, where the execution of unauthorized control data (i.e.,

a substitution of control data for one axis with control data for another axis) can result in catastrophic consequences.

Second, Ginter is directed to an asymmetric encryption method and authentication procedure that are based, in part, on the recipient device (Ginter, paragraphs [0173], [0525], [1619], [1636] and [1958]). For example, paragraph [1958] of Ginter discloses preventing operational materials from operating on an electronic appliance if a "machine signature check fails" (i.e., the signature of the recipient electronic appliance) (Ginter, paragraph [1958]). However, Ginter does not show or disclose authentication based on the sender of the controlled content. Thus, Ginter does not show or disclose *providing the first encoded machine control parameters with a sender identification of a sender; authenticating a sender based on a sender identification and a suitability of the encryption key assigned to the sender for the first decoded machine control parameters; if a sender is authenticated, second decoding the first decoded machine control parameters;* and *determining whether a module associated with a sender which generated the machine control parameters is actually suitable and authorized to do so,* as recited in amended claim 7.

Third, Ginter is directed to controlling electronic content from unauthorized distribution and use (Ginter, paragraphs [0010]-[0014]). In effect, Ginter is concerned with the rights and privileges of the recipient device to access and use the controlled content (e.g., proprietary content, such as music and software). However, Ginter does not show or disclose determining the suitability (i.e., technical feasibility or proper compatibility) of using the content on the recipient device based on the sender. Thus, Ginter does not show or disclose *authenticating a suitability of the encryption key assigned to the sender for the first decoded machine control parameters;* and *determining whether a module associated with a sender which generated the machine control parameters is actually suitable and authorized to do so,* as recited in amended claim 7

Further, this is not remarkable because Ginter discloses a "new kind of … virtual distribution environment … that secures, administers, and audits electronic information use" (i.e., motion pictures, magazines, newspapers, etc.) in trying to solve the "fundamental problem for electronic content provider … extending their ability to control the use of proprietary information" (Ginter, paragraphs [0011]-[0012]). Thus, Ginter is directed to preventing operational

materials 3472 from being used on another appliance, for instance, to prevent copying (Ginter, paragraphs [0013], [0091] and [0139]). In other words, Ginter is concerned with protecting the operational materials from unauthorized use; Ginter is not concerned with protecting the appliance or machine in which the material is used.

Ginter is not directed to authenticating a sender of machine control parameters to determine the feasibility of executing the machine control parameters on the multi-axis machine tool. For instance, Ginter is not directed to preventing damage to the recipient machine that can be caused by the execution of machine control parameters on the recipient machine that were sent from a sender that was not suitable and authorized (i.e., not properly configured) to generate machine control parameters for the recipient machine (Specification, paragraphs [0005]-[0006] and [0029]).

In view of this, at best, Ginter discloses an authentication of the rights and privileges of a recipient machine to receive and use controlled content (i.e., the authorization of an electronic device to use operational materials, such as music, movies and software). However, Ginter does not disclose determining the suitability and authorization of a sender to originate or transmit content to the recipient machine, the suitability and authorization being indicative of the feasibility of safe execution of the content on the recipient machine. Thus, Ginter does not show or disclose a *method of authenticating machine control parameters* for a *multi-axis* machine tool that is *based on the sender*, as recited in amended claim 7.

Therefore, Ginter does not show or disclose each recitation of amended claim 7. Since claim 10 depends directly from claim 7 and includes additional recitations thereto, Applicants respectfully submit that the rejection of claims 7 and 10 under 35 U.S.C. § 102(e) as being anticipated by Ginter is improper for at least these reasons, and should be withdrawn.

Applicants respectfully submit that nothing in the current Amendment constitutes new matter. Support for the amendments may be found in, at least, claims 26, 27 and paragraph [0029].

Having traversed each objection and rejection, Applicants respectfully request claims 7 and 10 be passed to issue.

Applicants hereby petition for a one-month extension of time to respond to the present Final Office Action. Applicants' Attorneys hereby authorize the Commissioner to charge the one-month extension fee of $130.00 to the Deposit Account 13-0235. Applicants believe that no other fees are due in connection with this Amendment and Response. If any fees are deemed necessary, please charge them to Deposit Account 13-0235.

Respectfully submitted,

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